APPLICATION TO DISCHARGE INDUSTRIAL WASTEWATER TO GROUND WATER

This application is for a wastewater discharge permit as required by Chapter 90.48 RCW and Chapter 173-216 WAC. It is designed to provide the Department of Ecology with information on pollutants in the waste stream, materials that may enter the waste stream, the flow characteristics of the discharge, and site characteristics at the point of discharge.

Information previously submitted to Ecology that applies to this application should be referenced in the appropriate section. Ecology may request additional information to clarify the conditions of this discharge.

SECTION A. GENERAL INFORMATION

1. Applicant Name: _____

2. Facility Name: _____
(if different from Applicant)

3. Applicant Address: _____
Street

_____
City/State Zip

4. Facility Address: _____
Street

_____
City/State Zip

5. Latitude/longitude of the treatment facility: UBI No. _____

____° ____' ____" N ____° ____' ____" W

Latitude/longitude of land application area (center):

____° ____' ____" N ____° ____' ____" W

FOR OFFICE USE ONLY		**Check One**	New/Renewal ☐ Modification ☐	
Date Application Received	____		Application/Permit No.	____
Date Application Accepted	____		Date Fee Paid	____

6. Contact person:

Name _____ Title _____

Telephone Number _____ Fax Number _____ Email _____

7. Check One:

☐ **Permit Renewal** (including renewal of temporary permits)

Does this application request a greater amount of wastewater discharge, a greater amount of pollutant discharge, or a discharge of different pollutants than specified in the last permit application for this facility? ☐ YES ☐ NO

For permit renewals, the current permit is an attachment, by reference, to this application.

☐ **Permit Modification**

☐ **Existing Unpermitted Discharge**

☐ **Proposed Discharge**

Anticipated date of discharge: _____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and/or imprisonment for knowing violations.

Signature* _____ Date _____ Title _____

Printed Name _____

*Applications must be signed as follows: Corporations, by a principal executive officer of at least the level of vice-president; partnership, by a general partner; sole proprietorship, by the proprietor. If these titles do not apply within your organization, the application must be signed by the person who makes budget decisions for this facility.

To receive this document in an alternate format, contact the Water Quality Program at (360) 407-6401 (Voice) or 711 or 1-800-833-6388 (TTY).

SECTION B. PRODUCT INFORMATION

1. Briefly describe all manufacturing processes and products, and/or commercial activities, at this facility. Provide the applicable Standard Industrial Classification (SIC) Code(s) for each activity (see *Standard Industrial Classification Manual,* 1987 ed.).

Description: _____

2. List raw materials and products used at this facility:

Type	RAW MATERIALS	Quantity

Type	PRODUCTS	Quantity

SECTION C. PLANT OPERATIONAL CHARACTERISTICS

1. For each process listed in B.1. that generates wastewater, list the process, assign the waste stream a name and an ID # and describe whether it is a batch or continuous flow.

Process	Waste Stream Name	Waste Stream ID#	Batch (B) or Continuous (C) Process

2. On a separate sheet, *(label as attachment C.2)*, produce a schematic drawing showing production processes, water flow through the facility and wastewater treatment devices. The drawing should indicate the source of intake water and the operations contributing wastewater to the effluent. The treatment units should be labeled. Construct the water balance by showing average flows between intakes, operations, treatment units, and points of discharge to land. If a water balance cannot be determined *(e.g., for certain mining activities)*, provide a description of the nature and amount of any sources of water and any collection or treatment measures.

3. What is the maximum daily discharge flow? _____ gallons/day?

   What is the maximum average monthly discharge flow (daily flows averaged over a month)? _____ gallons/day?

4. Describe any planned wastewater treatment improvements or changes in wastewater disposal methods, and the schedule for these improvements or changes. *(Use additional sheets, if necessary, and label as attachment C.4.)*

5. If production processes are subject to seasonal variations, provide the following information. List discharge for each waste stream in gallons per day (GPD). The combined value for each month should equal the estimated total monthly flow.

Waste Stream ID#	MONTHS											
	J	F	M	A	M	J	J	A	S	O	N	D
Estimated Total Monthly Flow (GPD)												

6. How many hours a day does this facility typically operate? _____
   How many days a week does this facility typically operate? _____
   How many weeks per year does this facility typically operate? _____

7. List all incidental materials, such as oil, paint, grease, solvents, and cleaners, that are used or stored on site. (List only those with quantities greater than 10 gallons for liquids and 50 pounds for solids.) For solvents and solvent-based cleaners, include a copy of the material safety data sheet and estimate the quantity used. (*Use additional sheets, if necessary, and label as attachment C.7.)*

   Materials/Quantity Stored: _____
   _____
   _____
   _____
   _____

8. Some types of facilities are required to have spill or waste control plans. Does this facility have:
   a. A Spill Prevention, Control, and Countermeasure Plan (40 CFR 112)? ☐ YES ☐ NO
   b. An Emergency Response Plan (per WAC 173-303-350)? ☐ YES ☐ NO
   c. A runoff, spillage, or leak control plan (per WAC 173-216-110(f))? ☐ YES ☐ NO
   Any spill or pollution prevention plan required by local, state or federal authorities? If yes, specify: _____ ☐ YES ☐ NO
   e. A Solid Waste Management Plan? ☐ YES ☐ NO

SECTION D. WATER CONSUMPTION AND WATER LOSS

1. Water source(s):

   ☐ Public System (Specify) _____

   ☐ Private Well ☐ Surface Water

   a. Water Right Permit Number: _____

   b. Legal Description of Water Source:

   _____ ¼S, _____ ¼E, _____, Section, _____ TWN, _____ R

2. Water use

   a. Indicate total water use: Gallons per day (average) _____

   Gallons per day (maximum) _____

   b. Is water metered? ☐ YES ☐ NO

SECTION E. WASTEWATER INFORMATION

1. How are the water intake and effluent flows measured?

   Intake: _____

   Effluent: _____

2. Provide measurements for treated wastewater prior to land application for the parameters with an "X" in the left column. Use the analytical methods given in the table unless an alternate method is approved by Ecology. All analyses (except pH) must be conducted by a laboratory registered or accredited by the Department of Ecology (WAC 173-216-125). If this is an application for permit renewal, provide data for the last year for parameters that are routinely measured. For parameters measured only for this application, place values under "Maximum".

X	Parameter	Concentrations Measured			Number of Analyses	Analytical Method Std. Methods 19th edition	Detection Limit
		Minimum	Maximum	Average			
	BOD (5 day)					5210	2 mg/l
	COD					5220 B, C, or D	5 mg/l
	Total Suspended Solids					2540D	1 mg/l
	Total Dissolved Solids					2540 C	
	Conductivity					2510 B	
	Ammonia-N					4500-NH_3 C	20 µg/l
	pH					4500-H	0.1 units
	Total Residual Chlorine					4500-Cl E	1 mg/l
	Fecal Coliform					9222 D	
	Total Coliform					9221 B or 9222 B	
	Dissolved Oxygen					4500-O C or 4500-O G	
	Nitrate + Nitrite-N					4500-NO_3 E	0.5 mg/l
	Total Kjeldahl N					4500-N_{org}	20 µg/l
	Ortho-phosphate-P					4500-P E or 4500-P F	1 µg/l
	Total-phosphate-P					4500-P B.4.	1 µg/l
	Total Oil & Grease					5520 C	0.2 mg/l

X	Parameter	Concentrations Measured			Number of Analyses	Analytical Method Std. Methods 19th edition	Detection Limit
		Minimum	Maximum	Average			
	Total Petroleum Hydrocarbon					5520 C, F	0.2 mg/l
	Calcium					3500-Ca B	3 µg/l
	Chloride					4500-Cl C	0.15 µg/l
	Fluoride					4500-F D	0.1 mg/l
	Magnesium					3500-Mg B	0.5 µg/l
	Potassium					3500-K B	5 µg/l
	Sodium					3500-Na B	2 µg/l
	Sulfate					4500-SO_4 E	1 mg/l
	Barium (total)					3500-Ba B	30 µg/l
	Cadmium (total)					3500-Cd B	5 µg/l
	Chromium (total)					3500-Cr B	50 µg/l
	Copper (total)					3500-Cu B	20 µg/l
	Iron (total)					3500-Fe B	20 µg/l
	Lead (total)					3500-Pb B	100 µg/l
	Manganese (total)					3500-Mn B	10 µg/l
	Mercury					3500-Hg B	0.2 µg/l
	Selenium (total)					3500-Se C	2 µg/l
	Silver (total)					3500-Ag B	10 µg/l
	Zinc (total)					3500-Zn B	5 µg/l

3. Describe the collection method for the samples analyzed above (*i.e.*, grab, 24-hour composite).

4. Has the effluent been analyzed for any other parameters than those identified in question E.2.? If yes, when? (*Attach results and label attachment E.4.) Note: Ecology may require additional testing.*

☐ YES ☐ NO

5. Does this facility use any of the following chemicals as raw materials, produce them as part of the manufacturing process, or are they present in the wastewater? (*The number following the chemical name is the Chemical Abstract Service (CAS) reference number to aid in identifying the compound.*)

☐ YES ☐ NO

If yes, specify how the chemical is used and the quantity used or produced: _____

Acrylamide/79-06-1
Acrylonitrile/107-13-1
Aldrin/309-00-2
Aniline/62-53-3
Aramite/140-57-8
Arsenic/7440-38-2
Azobenzene/103-33-3
Benzene/71-43-2
Benzidine/92-87-5
Benzo(a)pyrene/50-32-8
Benzotrichloride/98-07-7
Benzyl chloride/100-44-7
Bis(chloroethyl)ether/111-44-4
Bis(chloromethyl)ether/542-88-1
Bis(2-ethylhexyl) phthalate/
117-81-7
Bromodichloromethane/75-27-4
Bromoform/75-25-2
Carbazole/86-74-8
Carbon tetrachloride/56-23-5
Chlordane/57-74-9
Chlorodibromomethane/124-48-1
Chloroform/67-66-3
Chlorthalonil/1897-45-6
2,4-D/94-75-7
DDT/50-29-3
Diallate/2303-16-4
1,2 Dibromoethane/106-93-4
1,4 Dichlorobenzene/106-46-7
3,3' Dichlorobenzidine/91-94-1
1,1 Dichloroethane/75-34-3
1,2 Dichloroethane/107-06-2
Nitrofurazone/59-87-0
N-nitrosodiethanolamine/
1116-54-7
N-nitrosodiethylamine/55-18-5
N-nitrosodimethylamine/62-75-9
N-nitrosodiphenylamine/86-30-6
N-nitroso-di-n-propylamine/
621-64-7
N-nitrosopyrrolidine/930-55-2
N-nitroso-di-n-butylamine/
924-16-3
N-nitroso-n-methylethylamine/
10595-95-6
PAH/NA
PBBs/NA
PCBs/1336-36-3
1,2 Dichloropropane/78-87-5
1,3 Dichloropropene/542-75-6
Dichlorvos/62-73-7
Dieldrin/60-57-1
3,3' Dimethoxybenzidine/119-90-4
3,3 Dimethylbenzidine/119-93-7
1,2 Dimethylhydrazine/540-73-8
2,4 Dinitrotoluene/121-14-2
2,6 Dinitrotoluene/606-20-2
1,4 Dioxane/123-91-1
1,2 Diphenylhydrazine/122-66-7
Endrin/72-20-8
Epichlorohydrin/106-89-8
Ethyl acrylate/140-88-5
Ethylene dibromide/106-93-4
Ethylene thioureae/96-45-7
Folpet/133-07-3
Furmecyclox/60568-05-0
Heptachlor/76-44-8
Heptachlor epoxide/1024-57-3
Hexachlorobenzene/118-74-1
Hexachlorocyclohexane (alpha)/
319-84-6
Hexachlorocyclohexane (tech.)/
608-73-1
Hexachlorodibenzo-p-dioxin,
mix/19408-74-3
Hydrazine/hydrazine sulfate/
302-01-2
Lindane/58-89-9
2 Methylaniline/100-61-8
2 Methylaniline hydrochloride/
636-21-5
4,4' Methylene bis(N,N-
dimethyl)aniline/101-61-1
Methylene chloride
(dichloromethane)/75-09-2
Mirex/2385-85-5
O-phenylenediamine/106-50-3
Propylene oxide/75-56-9
2,3,7,8-Tetrachlorodibenzo-p-dioxi
n/ 1746-01-6
Tetrachloroethylene/127-18-4
2,4 Toluenediamine/95-80-7
o-Toluidine/95-53-4
Toxaphene/8001-35-2
Trichloroethylene/79-01-6
2,4,6-Trichlorophenol/88-06-2
Trimethyl phosphate/512-56-1
Vinyl chloride/75-01-4

6. Are any other pesticides, herbicides or fungicides used at this facility? ☐ YES ☐ NO
If yes, specify the material and quantity used.

7. Are there other pollutants that you know of or believe to be present? ☐ YES ☐ NO
If yes, specify the pollutants and their concentration if known ☐ DON'T KNOW
(attach laboratory analyses if available):

SECTION F. GROUND WATER INFORMATION

Provide available data measurements or ranges from monitoring wells or supply wells in the area of discharge. Provide the analytical method and detection limit, if known. Provide the location of each well on the map required in G.3 below. Attach well logs and well I.D. # when available. Copy this page as necessary for each well.

Well ID # _____

Parameter	Range of Measurements	Number of Analyses	Analytical Method	Detection Limit
BOD (5 day)				
COD				
Total Organic Carbon				
Ammonia-N				
pH				
Total Dissolved Solids				
Conductivity				
Total Hardness				
Fecal Coliform				
Total Coliform				
Dissolved Oxygen				
Nitrate + Nitrite-N, Nitrate				
Total Kjeldahl N				
Ortho-phosphate-P				
Total-phosphate-P				
Total Petroleum Hydrocarbon				
Calcium				
Chloride				
Fluoride				
Magnesium				
Potassium				
Sodium				
Sulfate				
Barium				
Cadmium				
Chromium				
Copper				
Iron				
Lead				
Manganese				
Mercury				
Selenium				
Silver				
Zinc				
Water Level				

SECTION G. SITE ASSESSMENT

Note: The Department of Ecology Water Resources Section can be consulted for identifying wells within one mile of your site. The local library and local city or county planning offices may be helpful in providing the information required in this section.

1. Give the legal description of the land treatment site(s) by section/township/range and latitude/longitude. Indicate owner for each site. Give the acreage of each land treatment site(s). Attach a copy (*label attachment as G.1*) of the contract(s) authorizing use of land for treatment.

2. If this is a new discharge, list all environmental control permits or approvals needed for this project; for example, SEPA review, septic tank permits, sludge application permits, or air emissions permits.

3. Attach an original United States Geological Survey (USGS) 7.5 minute topographic map. (*Label as attachment G.4.*) **USGS topographical maps are available from the Department of Natural Resources (360 902-1234), Metsker Maps (206-588-5222), and some local bookstores and internet sites.** Show the following on this map:

   a. Location and name of internal and adjacent streets.
   b. Surface water drainage systems within ¼ mile of the site.
   c. All wells within 1 mile of the site.
   d. Wastewater discharge points.
   e. Land uses and zoning adjacent to the wastewater application site.
   f. Ground water gradient.

4. Describe soils on the site using information from local soil survey reports. **Soils information is available from your county conservation district**. *(Submit on separate sheet and label as attachment G.4.)*

5. Describe the local geology and hydrogeology within one mile of the site. Include any ground water quality data. **The local library or soil conservation service may have this information**. *(Submit on separate sheet and label as attachment G.5.)*

6. List the names and addresses of contractors or consultants who provided information, and cite sources of information by title and author.

_____
_____
_____
_____
_____
_____

SECTION H. STORMWATER

1. Do you have coverage under the Washington State Industrial Stormwater NPDES General Permit? ☐ YES ☐ NO
   If yes, please list the permit number here. _____

   If no, have you applied for coverage under the Washington State Industrial Stormwater NPDES General Permit? ☐ YES ☐ NO

Note: If you answered "no" to both questions above, complete questions 2 through 6.

2. Describe the size of the stormwater collection area:
   a. Unpaved area _____ sq.ft.
   b. Paved area _____ sq.ft.
   c. Other collection areas (roofs) _____ sq.ft.

3. Does your facility's stormwater discharge to: *(Check all that apply)*
   ☐ Storm sewer system; name of storm sewer system *(operator):* _____
   ☐ Directly to any surface waters of Washington state *(e.g., river, lake, creek, estuary, ocean).*
   Specify waterbody name(s) _____
   ☐ Indirectly to surface waters of Washington state *(i.e., flows over adjacent properties first).*
   ☐ Directly to ground waters of Washington state by means of:
      ☐ Dry well
      ☐ Drainfield
      ☐ Other

4. Areas with industrial activities at facility: *(check all that apply)*

- ☐ Manufacturing building
- ☐ Material handling
- ☐ Material storage
- ☐ Hazardous waste treatment, storage, or disposal *(Refers to RCRA, Subtitle C Facilities Only)*
- ☐ Waste treatment, storage, or disposal
- ☐ Application or disposal of wastewaters
- ☐ Storage and maintenance of material handling equipment
- ☐ Vehicle maintenance
- ☐ Areas where significant materials remain
- ☐ Access roads and rail lines for shipping and receiving
- ☐ Other: _____

5. Material handling/management practices

a. Types of materials handled and/or stored outdoors: *(check all that apply)*

- ☐ Solvents
- ☐ Scrap metal
- ☐ Petroleum or petrochemical products
- ☐ Plating products
- ☐ Pesticides
- ☐ Hazardous wastes
- ☐ Acids or alkalies
- ☐ Paints/coatings
- ☐ Woodtreating products
- ☐ Other *(please list)*: _____

b. Identify existing management practices employed to reduce pollutants in industrial storm water discharges: *(check all that apply)*

- ☐ Oil/water separator
- ☐ Containment
- ☐ Spill prevention
- ☐ Surface leachate collection
- ☐ Overhead coverage
- ☐ Detention facilities
- ☐ Infiltration basins
- ☐ Operational BMPs
- ☐ Vegetation management
- ☐ Other *(please list)*: _____

6. Attach a map showing storm water drainage/collection areas, disposal areas and discharge points. This may be a hand-drawn map if no other site map is available. (*Label this as attachment H.6.)*

SECTION I. OTHER INFORMATION

1. Describe liquid wastes or sludges being generated by your facility that are not disposed of in the waste stream(s) and how they are being disposed of. For each type of waste, provide type of waste and the name, address, and phone number of the hauler.

2. Describe storage areas for raw materials, products, and wastes.

3. Have you designated the wastes described above according to the applicable procedures of Dangerous Waste Regulations, Chapter 173-303? ☐ YES ☐ NO ☐ DON'T KNOW

Summary of Attachments That May be Required for This Application:
(Please check those attachments which are included)

- ☐ C.2. Production schematic flow diagram and water balance
- ☐ C.4. Wastewater treatment improvements
- ☐ C.7. Additional incidental materials
- ☐ E.4. Additional results of effluent testing
- ☐ G.1. Copies of land use contracts
- ☐ G.3. USGS topographical map
- ☐ G.4. Soils description
- ☐ G.5. Local geology and hydrology
- ☐ H.6. Stormwater drainage map